



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/347,438	07/02/1999	SHAI MOHABAN	50325-074	3850
29989	7590	02/02/2004	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP 1600 WILLOW STREET SAN JOSE, CA 95125			BURGESS, BARBARA N	
			ART UNIT	PAPER NUMBER
			2157	20
DATE MAILED: 02/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/347,438	MOHABAN ET AL.	
	Examiner	Art Unit	
	Barbara N Burgess	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 27 December 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-4 and 6-30 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-4 and 6-30 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>12</u> .	6) <input type="checkbox"/> Other: _____ .

Art Unit: 2157

### **DETAILED ACTION**

This Office Action is in response to Request for Reconsideration filed on November 3, 2003.

Claims 1-4, and 6-30 are presented for further examination.

#### **Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action-

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 6-9, 14-16, 20-22, 24-25, 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Martin.

As per claims 1, 20, 21, 29, and 30, Martin discloses a method of selectively establishing a quality of service value for a particular network device in a network that comprises a plurality of other heterogeneous network devices, comprising the steps of:

- Receiving application information that defines one or more traffic flows associated with one or more message types generated by an application program, including information identifying one or more points at which an application generates the traffic flows (column 2, lines 25-28, 44-47, column 3, lines 2-4, 9-15, 34-39, 48-49, 55-59, column 4, lines 1-5, 13-15, 33-38, 52-55, column 5, lines 1-3, column 9, lines 65-67, column 10, lines 1-2);
- Receiving device information that defines one or more quality of service treatments that the network device may apply to data processed by the network device (column 2, lines 7-13, column 7, lines 19-21, 27-30);
- Based on the device information and the application information, determining one or more processing policies that associate the traffic flows with the quality of service treatments (column 2, lines 17-20, column 3, lines 32-45, 65-67, column 4, lines 1, 29-32, 55-60, column 7, lines 55-59, column 8, lines 54-57, column 9, lines 65-67, column 10, lines 1-2);
- Creating and storing one or more mappings of the application points to the quality of service treatments that may be used with the processing policies to generate the quality of service value when the application program generates traffic flows of one of the message types (column 3, lines 55-56, column 4, lines 20-25, 64-67, column

5, lines 5-7, column 8, lines 38-40, 47-50, column 10, lines 3-5, 34-35, 40-46, column 13, lines 50-53);

- Causing generation of the quality of service value, wherein the generation of the quality of service value is based on said one or more mappings and is performed before transmitting said traffic flows of one of the message types to said network (column 3, lines 55-59, 65-67, column 4, lines 1-5, 29-32, 60-63, column 5, lines 5-12, column 8, lines 31-58, column 9, lines 20-23, 29-33, 41-44).

As per claims 2 and 22, Martin discloses:

- Storing the mappings in a repository that is accessible by the application program (column 4, lines 57-60, 64-67, column 5, lines 5-7, column 10, lines 18-24, column 13, lines 42-48);
- Storing both the application information and the device information in the repository (column 7, lines 6-17, column 8, lines 32-38, column 13, lines 35-40);  
Converting the mappings into one or more settings of the network device (column 2, lines 14-20, column 3, lines 44-45, 50-51, column 4, lines 29-31);
- Enforcing one of the processing policies at the network device in response to receiving traffic from the application program that matches the traffic flow type (column 10, lines 3-6, column 11, lines 23-25).

As per claims 6, 7, and 24, Martin discloses:

Art Unit: 2157

- Creating and storing one or more mappings comprises creating and storing one or more mappings comprises creating and storing one or more policies, concerning network processing of traffic flows generated by the application program, in the repository (column 3, lines 55-56, column 4, lines 20-25, 29-32, 64-67, column 5, lines 5-7).

As per claim 8, Martin discloses:

- Creating and storing one or more mappings comprises creating and storing one or more mappings comprises creating and storing one or more policies, concerning network processing of traffic flows generated by the application program, in a directory (column 3, lines 55-56, column 4, lines 20-25, 29-32, 64-67, column 5, lines 5-7, column 7, lines 6-10).

As per claims 9 and 25, Martin discloses:

- Creating and storing one or more mappings comprises creating and storing one or more policies, concerning network processing of traffic flows generated by the application program, in a policy server coupled to Lightweight Directory Access Protocol directory that comprises the repository (column 6, lines 12-14).

As per claims 14, 15, and 27, Martin discloses determining one or more processing policies comprises creating and storing one or more policy statements in a repository (as shown in the rejection of claims 1, 6, and 8) and a policy defines actions to be

Art Unit: 2157

applied to a flow and also identifies to whom the actions are to be applied (column 8, lines 55-57, column 9, lines 49-51). Therefore, Martin implicitly discloses determining one or more processing policies comprises creating and storing one or more policy statements in a repository, wherein each policy statement associates a condition of one of the traffic flows, an operator, an operand, and an action comprising one of the quality of service treatments.

As per claims 16 and 28, Martin discloses determining one or more processing policies comprises creating and storing one or more policy statements in a directory (as shown in the rejections of claims 1, 6, and 8), wherein an entity can define mappings between one or more flow parameters, entities and quality of service identifiers and quality of service identifiers and quality of service definitions which contain rules. The rules or policies defines actions to be applied to a flow and also identifies to whom the actions are to be applied. These mappings are stored in a directory service (column 4, lines 56-60, 64-67, column 8, lines 38-40, 47-50, 55-57).

Therefore, Martin implicitly discloses determining one or more processing policies comprises creating and storing one or more policy statements in a repository, wherein each statement is represented by a plurality of nodes that represent a condition of one of the traffic flows, an operator and an action comprising one of the quality of service treatments, and wherein the plurality of nodes is coupled to a root node having a distinguished name in the directory.

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-4, and 23 are rejected under 35 U.S.C. 103(x) as being unpatentable over Martin in view of Chapman et al. (hereinafter "Chapman", 6,028,842).

As per claims 3 and 23, Martin does not explicitly disclose creating and storing one or more classes that classify the traffic flows, each of the classes comprising one or more types of traffic flows and based on the traffic flows, determining one or more processing policies that associate the traffic flows with the quality of service treatments. However, the use and advantages for classifying traffic flows is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Chapman (column 1, lines 33-34, column 2, lines 1-3, 6-7, 27-28, 40-43, 50-53).

Art Unit: 2157

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate classifying traffic flows in Martin's method allowing administrative policies to give, for instance, certain groups different treatment than other groups.

As per claim 4, Martin does not explicitly disclose receiving application information comprises receiving one or more application code points that represent traffic flow types. However, the use and advantages for using application code points to represent traffic flow types is well known to one skilled in the relevant art at the time the invention was made as evidenced by Chapman (column 3, lines 46-48, 51-55, 63, 6566, column 4, lines 3-5, 8-10, 12-14, 19-22, 29-31).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate application code points in Martin's method order to allocate bandwidth and implement an admission control policy for classes before delivering a packet.

5. Claims 10-11, 17, 19, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Chapman in further view of Mohaban et al. (hereinafter "Mohaban", 6,463,470).

As per claims 10-11, 17, 19, and 26, Martin; in view of Chapman, does not explicitly disclose creating and storing one or more mappings further comprises creating and storing, in the repository, one or more mappings of Application Code Points of the

Art Unit: 2157

application program to one or more Differential Services Code Points of a protocol associated with the network device. However, in an analogous art, Mohaban discloses the use of RSVP or Differential Services Code Points to request a particular quality of service for a particular traffic flow (column 4, lines 38-49, column 7, lines 17-25).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Differential Services Code Points and RSVP's in Martin's, in view of Chapman, method allowing the relative importance of a particular traffic group to be defined.

6. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Schwaller et al. (hereinafter "Schwaller", 6,061,725).

As per claims 12 and 13, Martin does not explicitly disclose receiving application information comprises receiving application information that defines one or more traffic flows generated by an application program, including information identifying one or more points at which an application generates the traffic flows, from a first and second individual having responsibility for managing enterprise applications in the network. However, in an analogous art, Schwaller discloses application testers that simulate a user reading screens and typing at a keyboard to create network traffic (column 2, lines 49-58).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate a first and second individual

Art Unit: 2157

having responsibility for managing enterprise applications in the network in Martin's method allowing for testing of the application and creating network traffic.

7. The following is a quotation of 35 U.S. C. 103(c) which forms the basis for all obviousness rejections set forth in this Office action:

(c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

8. Claim 18 is rejected under 35 U.S.C. 103(c) as being unpatentable over Martin in view of McCloghrie et al. (hereinafter, "McClogherie", 6,286,052).

Martin does not explicitly disclose requesting an operating system function to modify a packet of the traffic flows using a policy element that requests a different operating system function according to the operating system then in use and at the network device, in response to receiving traffic from the application program that matches the traffic flow type and in response to the operating system function, modifying the packet to activate a quality of service treatment of the network device. However, in an analogous art, McCloghrie discloses an operating system that is utilized for traffic management services, such as classifying packets (column 20, lines 19-40).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an operating system for modifying packets to activate a quality of service treatment in Martin's method in order for the packets to be sent across the network according to the quality of service needed.

### **Response to Arguments**

**The Office notes the following argument:**

- (a) McCloghrie cannot be 102(e) prior art for the purposes of 35 USC 103 because McClogherie and the claimed invention are subject to common ownership.
- (b) Martin does not disclose a system that receives application information that defines one or more traffic flows associated with one or more message types generated by an application program, including information identifying one or more points at which an application generates the traffic flows as claimed in the invention.
- (c) Martin does not contemplate the use of application points which are points where an application generates traffic flows because Martin has no need for such information.
- (d) Martin does not disclose a system that creates and stores one or more mappings of the application points to the quality of service treatments that may be used with the processing policies to generate the quality of service value when the application program generates traffic flows of one of the message types as claimed.
- (e) Office Action cites claim 25 in the text, but does not list said claim in the 35 U.S.C. 102(e) rejection

Art Unit: 2157

**In response to:**

(a) Applicant's arguments filed have been fully considered but they are not persuasive.

Based on applicant's filing date of July 2, 1999, which applies under 35 U.S.C. 103(c) as stated above, the McCloghrie reference can be prior art because the inventors of this reference are not exactly the same as those of the present application.

(b) Martin indeed discloses a system **receiving** information regarding traffic flows and one or more points at which an application generates the traffic flows. Regardless of **when** this information is received, it is received nonetheless. Therefore, Martin does teach the **claimed** invention.

(c)-(d) Martin teach different instances of an entity and mapping flows associated with each instance. Therefore, the use of application points is disclosed by Martin.

(e) Claim 25 has now been included.

**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,430,154 B1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N Burgess whose telephone number is (703) 305-3366. The examiner can normally be reached on M-F (8:00am-4:00pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Ettinene can be reached on (703) 308-7562. The fax phone numbers

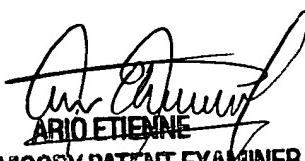
Art Unit: 2157

for the organization where this application or proceeding is assigned are (703) 746-7239  
for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the receptionist whose telephone number is (703) 305-  
3900.

Barbara N Burgess Examiner Art Unit 2157

September 7, 2003



~~ARIO ETIENNE~~  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100